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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/054,986	04/03/98	STAVNES	M SC-5285

IM62/1025

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EXAMINER

NOLAN, S

ART UNIT	PAPER NUMBER
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1772

*10*

DATE MAILED: 10/25/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/054,986

Applicant(s)

STAVNES et al

Examiner

Sandra Nolan

Group Art Unit  
1772



☒ Responsive to communication(s) filed on Sept. 30, 2000

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 24-26, 28, 33, 36, and 39 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 24-26, 28, 33, 36, and 39 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### **DETAILED ACTION**

#### **CONTINUED PROSECUTION APPLICATION**

1. The request filed on September 30, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) (Paper No. 9) based on parent Application No. 09/054,986 is acceptable and a CPA has been established. An action on the CPA follows.

#### **PENDING CLAIMS**

2 After entry of the amendment dated July 7, 2000 (Paper No. 6), the pending claims are 24-26, 28, 33, 36, and 39.

#### **REJECTIONS WITHDRAWN**

3. The 35 USC 103 rejection of claims 1, 5, 8, 13, 15, 17-20, 24-26, 36, and 39 (now claims 24-26) as unpatentable over Rinehart (US 5,015,514) and Tobin (US 4,349,803), recited in paragraph 3 of Paper No. 2 and repeated in paragraph 2 of the May 2, 2000 Office Action (Paper No. 5), is withdrawn in view of Applicants' arguments in Paper No. 6.

4. The 35 USC 103 rejection of claims 28 and 33 (now claims 28, 33, 36 and 39 as unpatentable over Rinehart and Tobin in view of Schmunk (US 4,313,100), as set out in paragraph 4 of Paper No. 2 and repeated in paragraph 3 of Paper No. 5, is withdrawn in view of Applicants' arguments in Paper No. 6.

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NEW REJECTIONS

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- ① 6. Claim 36 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The phrase “and such that the minimum predetermined wall thickness is unaffected by the winding variations”, which was added to claim 36 via the amendment in Paper No. 6, is new matter because it is not recited in the specification as originally filed.

Please delete the new matter from the claim.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (US 5,975,145) in view of Tobin (US 4,349,803).

Brown et al teach arc-quenching fuse tubes (title) that may have inner/outer layers made from epoxy binder/fiber combinations in compositions (col. 12, lines 24+). The compositions contain 5 to 80% fiber (col. 4, lines 37+), and 5 to 65% epoxy resin (col. 5, lines 51+). They do not teach melamine in their compositions.

Tobin shows the conventionality of melamine (col. 4, line 16) as an arc-quenching filler for fiber reinforced (abstract), epoxy resin bound (col. 4, line 22) fuse tubes.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the conventional melamine arc quenching additive taught by Tobin in the fuse tubes of Brown et al for its well known function.

The suggestion to employ the melamine of Tobin with the epoxy resin and fibers of Brown et al is found at column 4, lines 9 and 22 of Tobin, who teaches the use of these materials with his melamine arc-quenching additive.

9. Claims 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al and Tobin as applied to claims 24-26 above, and further in view of Schmunk (US 4,313,100).

Brown et al and Tobin are discussed above. They do not show tapered bores.

Schmunk shows tapered bores in fuse tubes (Figure 5).

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It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the compositions suggested by the combination of Brown et al and Tobin to make fuse tubes having tapered inner bores, such as those taught by Schmunk.

The motivation to make fuse tubes having tapered bores is in the last sentence of Schmunk's abstract, where he teaches that the tapered bores obviate clogging and the stagnation of gasses within the bore.

10. Claims 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al in view of Schmunk.

Brown et al and Schmunk are discussed above.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the winding process of Brown et al to make fuse tubes having any desired thicknesses and having tapered bores, as shown by Schmunk.

The motivation to tailor the thickness of the layers is found at column 13, lines 1-5 of Brown et al, where they teach that the thickness may vary and depend on such factors as resin type, the materials used to make the outer shell, the end use of the tube, and the like. The use of a non-overlapping first winding would have been an obvious way to minimize the thickness of the inner layer.

The motivation to use a tapered bore is discussed above, under paragraph 9.

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RESPONSE TO ARGUMENTS

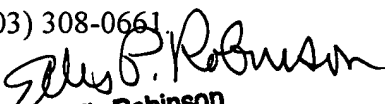
11. Applicant's arguments with respect to the finally rejected claims have been considered but are moot in view of the new ground(s) of rejection.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra M. Nolan, whose telephone number is (703) 308-9545. The examiner can normally be reached on Monday through Thursday from 7:00 am to 4:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ellis P. Robinson, can be reached on (703) 308-2364. The fax phone number for the organization where this application is assigned is (703) 305-5408.

The telephone number for the receptionist is (703) 308-0661.

  
Ellis Robinson  
Supervisory Patent Examiner  
Technology Center 1700

SMN/smn  
October 23, 2000  
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